REMARKS

The Office Action dated April 14, 2008 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Claims 1-24 are pending in the application. Claims 1-22 have been amended to more particularly point out and distinctly claim the subject matter of the invention. Claims 23-24 have been added. Support for these amendments may be found throughout the Specification, such as on page 17, line 6. No new matter is added. Applicant submits the pending claims for consideration in view of the following.

Claim Objections

Claim 11 was objected to for containing two periods. Consequently, claims 12-18 were also objected to for depending on claim 11. However, upon reviewing claim 11, Applicant was unable to locate the two periods upon which this objection is based. Withdrawal of these objections is therefore respectfully requested.

§103(a) Rejections

Claims 1-2, 6-8, 11-12, 16-18, and 21 were rejected under 35 U.S.C. §103(a) as being unpatentable over Schweitzer et al. (US 2002/0013849, hereinafter "Schweitzer") in view of Jogalekar (US 7,002,977, hereinafter "Jogalekar"). The Office Action stated that Schweitzer fails to disclose or suggest, enforcing a charging policy at the network

element and observing said data reaching said network element. This rejection is traversed as follows.

Claim 1, upon which claims 2-8 depend, is generally directed to a method that includes enforcing a charging policy at a network element to be applied to reaching the network element during a packet data protocol context, the packet data protocol context comprising a plurality of data flows, with each data flow being distinguishable by a set of flow parameters, wherein said charging policy defines charging rules per flow of the plurality of flows. The method also includes observing said data reaching said network element and detecting at least one flow of data, matching said detected flow of data to an enforced charging policy, and applying said enforced charging policy to said data flow, thereby generating charging information.

Claim 9, upon which claim 10 depends, is generally directed to a method that includes creating a plurality of charging policies, each charging policy of the charging policies comprising at least one flow parameter, and at least one of a charging/accounting type, an accounting event trigger, a charging metrics, and a tariffing indication. The method also includes selecting a charging policy based on offered services and subscriber information, and distributing said selected charging policy to at least one network element to be enforced at said at least one network element for charging of data reaching said at least one network element during a packet data protocol context.

Claim 11, upon which claims 12-18 depend, is generally directed to an apparatus that includes an enforcing unit configured to enforce a charging policy at a network

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element to be applied to data reaching the network element during a packet data protocol context, the packet data protocol context comprising a plurality of data flows, with each data flow of the plurality of data flows being distinguishable by a set of flow parameters, wherein said charging policy defines charging rules per data flow of the plurality of flows. The apparatus also includes an observation unit configured to observe said data reaching said network element and detect at least one flow of data, a matching unit configured to match said detected flow of data to an enforced charging policy, an application unit configured to apply said enforced charging policy to said flow, and a generation unit, responsive to said application unit, configured to generate charging information.

Claim 19, upon which claim 20 depends, is generally directed to an apparatus that includes a creation unit configured to create a plurality of charging policies, each charging policy of the plurality of charging policies comprising at least one flow parameter, and at least one of a charging/accounting type, an accounting event trigger, a charging metrics, and a tariffing indication. The apparatus also includes a selection unit configured to select a charging policy based on offered services and subscriber information, and a distribution unit configured to distribute said selected charging policy to at least one network element, with the charging policy to be enforced at said at least one network element for charging of data reaching said at least one network element during a packet data protocol context.

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Claim 21 is generally directed to an apparatus that includes an enforcing means configured to enforce a charging policy at a network element to be applied to data reaching the network element during a packet data protocol context, the packet data protocol context comprising a plurality of data flows, with each data flow of the plurality of data flows being distinguishable by a set of flow parameters, wherein said charging policy defines charging rules per data flow of the plurality of flows. The apparatus also includes an observation means configured to observe said data reaching said network element and detect at least one flow of data, a matching means configured to match said detected flow of data to an enforced charging policy, an application means configured to apply said enforced charging policy to said flow, and a generation means, responsive to said application means, configured to generate charging information.

Claim 22 is generally directed to an apparatus that includes a creation means configured to create a plurality of charging policies, each charging policy of the plurality of charging policies comprising at least one flow parameter, and at least one of a charging/accounting type, an accounting event trigger, a charging metrics, and a tariffing indication. The apparatus also includes a selection means configured to select a charging policy based on offered services and subscriber information, and a distribution means configured to distribute said selected charging policy to at least one network element, with the charging policy to be enforced at said at least one network element for charging of data reaching said at least one network element during a packet data protocol context.

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Claim 23 is generally directed to a computer program embodied on a computer-readable medium. The computer program configured to control a processor to perform operations that include enforcing a charging policy at the network element to be applied to data reaching the network element during a packet data protocol context, the packet data protocol context comprising a plurality of data flows, with each data flow being distinguishable by a set of flow parameters, wherein said charging policy defines charging rules per flow of the plurality of flows. The operations also include observing said data reaching said network element and detecting at least one flow of data, matching said detected flow of data to an enforced charging policy, and applying said enforced charging policy to said data flow, thereby generating charging information.

Claim 24 is generally directed to a computer program embodied on a computer-readable medium. The computer program configured to control a processor to perform operations that include creating a plurality of charging policies, each charging policy of the charging policies comprising at least one flow parameter, and at least one of a charging/accounting type, an accounting event trigger, a charging metrics, and a tariffing indication. The operations also include selecting a charging policy based on offered services and subscriber information, and distributing said selected charging policy to at least one network element to be enforced at said at least one network element for charging of data reaching said at least one network element during a packet data protocol context.

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Each of the foregoing claims recites limitations that are not disclosed or suggested by a combination of Schweitzer and Jogalekar.

Schweitzer generally discloses a method for policy-based billing in a network architecture. In Schweitzer, packet sources provide data packets to a filter. The filter is provided to filter out certain packets such as exclusively local packets. An analyzer analyzes the filtered packets to assign the packets to flows and then to sessions. The analyzer can also gather statistics about the flows and session, and provide the statistics to a data collector. The filter, analyzer, and data collector have access to a policy that controls how the system operates to execute policy-based billing.

Jogalekar generally discloses a system and method for policy based accounting and billing for network services. In one embodiment of Jogalekar, a packet forwarding device receives a packet to be forwarded over the network, accesses a policy table to identify a billing party associated with the packet, obtains billing information, and stores a record of the forwarded packet and the associated billing party.

However, a combination of Schweitzer and Jogalekar fails to disclose or suggest, at least, "enforcing a charging policy at a network element to be applied to reaching the network element during a packet data protocol context, the packet data protocol context comprising a plurality of data flows, with each data flow being distinguishable by a set of flow parameters, wherein said charging policy defines charging rules per flow of the plurality of flows," as recited in claim 1, and as analogously recited in claims 11, 21, and 23.

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According to the present invention, the current level of traffic differentiation and traffic-type awareness of a GPRS architecture can be extended beyond a PDP Context level. Indeed, it is possible to apply differentiated charging for the traffic flows belonging to different services (a.k.a. different service data flows) even if they use the same PDP Context.

In contrast, Schweitzer, which is concerned with network management and session reconstruction in a network environment, discloses, in paragraph 33, that "the term 'session' refers to a group of related flows within a definite time bound relating to an end user experience, each of the flows may share one or more common packet header elements. Thus, for the ftp application, a session is comprised of the flows containing the commands as well as of the flows used for transferring files. For a voice over IP call, the control flows as well as all of the flows containing voice and/or video data would be part of a single session." Therefore, Schweitzer fails to disclose, for example, that the sessions include a plurality of data flows, with each data flow being distinguishable by a set of flow parameters. Additionally, Schweitzer fails to disclose that, for example, a charging policy defines charging rules per flow of the plurality of flows.

In other words, Schweitzer fails to disclose the claimed "enforcing a charging policy...during a packet data protocol context, the packet data protocol context comprising a plurality of data flows, with each data flow being distinguishable by a set of flow parameters, wherein said charging policy defines charging rules per flow of the plurality of flows," as recited in claim 1, and as analogously recited in claims 11, 21, and

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23. It follows, that Schweitzer fails to disclose the claimed "packet data protocol context" that includes "a plurality of data flows," each flow thereof "being distinguishable by a set of flow parameters" and the charging policy defining "charging rules per flow of the plurality of flows," as recited in claim 1, and as analogously recited in claims 11, 21, and 23.

Similarly, Jogalekar fails to disclose or suggest these features. At Figure 1 and column 7, lines 8-44, Jogalekar discloses a system for policy based accounting and billing. In Jogalekar, a classifier engine 422 receives, authenticates, and authorizes data packets. The classifier engine 422 also writes a card statistic 326 regarding packets forwarded, dropped, or otherwise handled by the line card 202. The system also includes a forwarding engine 424 that forwards packets approved by the classifier engine 422.

However, Jogalekar, similar to Schweitzer, fails to disclose or suggest the claimed "enforcing a charging policy...during a packet data protocol context, the packet data protocol context comprising a plurality of data flows, with each data flow being distinguishable by a set of flow parameters, wherein said charging policy defines charging rules per flow of the plurality of flows," as recited in claim 1, and as analogously recited in claims 11, 21, and 23. It follows, that Jogalekar fails to disclose the claimed "packet data protocol context" that includes "a plurality of data flows," each flow thereof "being distinguishable by a set of flow parameters" and the charging policy defining "charging rules per flow of the plurality of flows."

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In light of the above, Applicant has shown that Schweitzer and Jogalekar each fail to disclose or suggest "enforcing a charging policy...during a packet data protocol context, the packet data protocol context comprising a plurality of data flows, with each data flow being distinguishable by a set of flow parameters, wherein said charging policy defines charging rules per flow of the plurality of flows," as recited in claim 1, and as analogously recited in claims 11, 21, and 23. Consequently, a combination of Schweitzer and Jogalekar also fails to disclose "enforcing a charging policy...during a packet data protocol context, the packet data protocol context comprising a plurality of data flows, with each data flow being distinguishable by a set of flow parameters, wherein said charging policy defines charging rules per flow of the plurality of flows," as recited in claim 1, and as analogously recited in claims 11, 21, and 23.

In light of the above, a combination of Schweitzer and Jogalekar fails to disclose or suggest all the limitations of claims 1, 11, 21, and 23. Therefore, Applicant respectfully requests that the rejection of claims 1, 11, and 21 be withdrawn. Similarly, Applicant respectfully requests that the rejection of claims 2, 6-8, 12, and 16-18 be withdrawn for their dependency from claims 1 and 11, and for the patentable subject matter recited therein. Additionally, Applicants respectfully assert the patentability of new claim 23 in accordance with the above.

Claims 3 and 13 were rejected under 35 U.S.C. §103(a) as being unpatentable over Schweitzer in view of Jogalekar, and further in view of Gai et al. (US 7,185,073, hereinafter "Gai"). The Office Action took the position that Schweitzer and Jogalekar

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fail to disclose the limitations specifically recited in claims 3 and 13, but relies on Gai to account for the deficiencies of Schweitzer and Jogalekar. This rejection is traversed on at least the grounds that a combination of Schweitzer, Jogalekar, and Gai fails to disclose all the limitations of claims 3 and 13 because Gai fails to remedy the deficiencies of Schweitzer and Jogalekar.

The deficiencies of Schweitzer and Jogalekar are presented above. Gai generally discloses a method and apparatus for defining and implementing a high-level quality of service policy in a computer network. However, Gai, similar to Schweitzer and Jogalekar, fails to disclose or suggest, "enforcing a charging policy…during a packet data protocol context, the packet data protocol context comprising a plurality of data flows, with each data flow being distinguishable by a set of flow parameters, wherein said charging policy defines charging rules per flow of the plurality of flows," as recited in claim 1, and as analogously recited in claims 11, 21, and 23.

As such, a combination of Schweitzer, Jogalekar, and Gai fails to disclose all the limitations of claims 1 and 11, from which claims 3 and 13 depend. Therefore, Applicant respectfully requests that the rejection of claims 3 and 13 be withdrawn for their dependency from claims 1 and 11, as well as for the patentable subject matter recited therein.

Claims 4-5 and 14-15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Schweitzer and Jogalekar in view of Amin et al. (US 2002/0152319, hereinafter "Amin"). The Office Action acknowledged that Schweitzer and Jogalekar fail

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to disclose the limitations specific to claims 4 and 14, from which claims 5 and 15 depend. To support the rejection, the Office Action relied upon Amin. This rejection is traversed on at least the grounds that a combination of Schweitzer, Jogalekar, and Amin fails to disclose all the limitations of claims 4-5 and 14-15 because Amin fails to remedy the deficiencies of Schweitzer and Jogalekar.

The deficiencies of Schweitzer and Jogalekar are presented above. Amin generally discloses a support system for accounting management based on quality of service and Internet protocol centric distribution networks. However, Amin, similar to Schweitzer and Jogalekar, fails to disclose or suggest, "enforcing a charging policy...during a packet data protocol context, the packet data protocol context comprising a plurality of data flows, with each data flow being distinguishable by a set of flow parameters, wherein said charging policy defines charging rules per flow of the plurality of flows," as recited in claim 1, and as analogously recited in claims 9, 11, 19, and 21-24.

As such a combination of Schweitzer, Jogalekar, and Amin fails to disclose all the limitations of claims 1 and 11, from which claims 4-5 and 14-15 depend. Therefore, Applicant respectfully requests that the rejection of claims 4-5 and 14-15 be withdrawn for their dependency from claims 1 and 11, as for the patentable subject matter recited therein.

Claims 9, 19, and 22 were rejected under 35 U.S.C. §103(a) as being unpatentable over Jogalekar in view of Schweitzer. As presented above, a combination of Schweitzer

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and Jogalekar fails to disclose the claimed "charging policy" and "packet data protocol context" that includes "a plurality of data flows" that are distinguishable by a "set of flow parameters." Similarly, a combination of Schweitzer and Jogalekar fails to disclose the claimed "charging policy" and "packet data protocol context," as recited in claims 9, 19, 22, and 24. As such, a combination of Schweitzer, Jogalekar, and Amin fails to disclose all the limitations of claims 9, 19, 22, and 24. Therefore, Applicant respectfully requests that the rejection of claims 9, 19, and 22. Additionally, Applicant respectfully asserts the patentability of new claim 24.

Claims 10 and 20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Jogalekar and Schweitzer in view of Hurtta et al. (US 2006/0058006, hereinafter "Hurtta"). The Office Action acknowledged that Jogalekar and Schweitzer are silent regarding a charging policy that is selected for a type of network element. However, the Office Action alleged that Hurtta disclosed such limitations. This rejection is traversed on at least the grounds that a combination of Schweitzer, Jogalekar, and Hurtta fails to disclose all the limitations of claims 10 and 20 because Hurtta fails to remedy the deficiencies of Schweitzer and Jogalekar.

Hurtta discloses a method for performing a charging in a telecommunications system. However, Hurtta, similar to Schweitzer and Jogalekar, fails to disclose the "charging policy" and "packet data protocol context" recited in claims 9 and 19, from which claims 10 and 20 depend. Therefore, Applicant respectfully requests that the

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rejection of claim 10 and 20 be withdrawn for their dependency from claims 9 and 19, and for the patentable subject matter recited therein.

Conclusion

In light of the above, Applicant respectfully requests that the pending claims promptly pass to allowance and issue.

However, if for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.
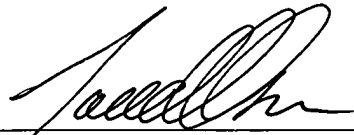
Additionally, the foregoing comments made with respect to the positions presented in the Office Action are not to be construed as acquiescence with other positions presented in the Office Action that have not been explicitly contested. Accordingly, the above arguments for patentability of a claim should not be construed as implying that there are not other valid reasons for patentability of the claim or other claims. Additionally, the Applicant does not acquiesce that the cited art anticipates or renders obvious any of the claims as previously presented, and reserve the right to pursue any of the previously presented claims in a subsequent application.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by

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telephone, the applicants' undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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